Lorenzo Palazzetti

Curriculum Vitæ

Last update: November 4, 2022

Short Biography -

I received the Bachelor and Master degrees in Computer Science from the University of Perugia, Italy, in 2018 and 2020, respectively. I am currently a third year PhD student under the supervision of Prof. Cristina M. Pinotti at the University of Florence, Italy. My research interests include design and analysis of algorithms, combinatorial optimization, unmanned vehicles.

Research Interests —

Algorithms Design, Combinatorial Optimization, Unmanned Vehicles.

Education —

11/2020-now	Ph.D., Computer Science. Advisor: Maria Cristina Pinotti, Dept. of Computer Science and Math., University of Florence (Italy).
12/2018-09/2020	M.Sc., Computer Science. Thesis title: "Routing drones being aware of wind conditions: the wind impact on the drone's route". Advisor: Maria Cristina Pinotti. Dept. of Computer Science and Math., University of Perugia (Italy). Judgment: summa cum laude .
09/2015–11/2018	B.Sc., Computer Science. Thesis title: "Lattice-Based Cryptography". Advisor: Marco Baioletti. Dept. of Computer Science and Math., University of Perugia (Italy). Judgment: 104/110 .

09/2010–07/2015 **Secondary School Diploma in IT.** Technical Pole Franchetti Salviani, Città di Castello (Italy). Judgment: *100/100*.

Work Experience –

03/2022-06/2022	Algorithm and Data Structures Tutoring. Università degli Studi di Perugia, Perugia, Italy.
10/2019–12/2019	University Internship. Advisor: Valentina Poggioni. Project title: <i>Neural Collaborative Filtering: a Framework for Recommendations</i> . Dept. of Computer Science and Math., University of Perugia.
04/2018-06/2018	System Manager. Comune di Umbertide, Perugia, Italy.
03/2014-05/2014	System Manager. Comune di Città di Castello, Perugia, Italy.

Research Publications -

Journal Articles

(1) Francesco Betti Sorbelli, Federico Corò, Sajal K Das, **Lorenzo Palazzetti**, Cristina M Pinotti. "On the Scheduling of Conflictual Deliveries in a last-mile delivery scenario with truck-carried drones". In: Pervasive and Mobile Computing (PMC) (2022).

Conference and Workshop Proceedings

- (1) **Lorenzo Palazzetti**. "Routing Drones Being Aware of Wind Conditions: a Case Study". 17th International Conference on Distributed Computing in Sensor Systems (DCOSS), July 14-16, 2021.
- (2) **Lorenzo Palazzetti**, Cristina M. Pinotti, and Giulio Rigoni. "*A run in the wind: Favorable winds make the difference in drone delivery*". 17th International Conference on Distributed Computing in Sensor Systems (DCOSS), July 14-16, 2021.
- (3) Francesco Betti Sorbelli, Federico Corò, Sajal K. Das, **Lorenzo Palazzetti**, and Cristina M. Pinotti. "Cooperative Truck-Drone Scheduling Approach for Last-Mile Deliveries". In: Italian Conference on Theoretical Computer Science (ICTCS short paper), September 13-15, 2021.
- (4) Francesco Betti Sorbelli, Federico Corò, Sajal K. Das, **Lorenzo Palazzetti**, and Cristina M. Pinotti. "*Greedy Algorithms for Scheduling Package Delivery with Multiple Drones*". In: 23rd International Conference on Distributed Computing and Networking (ICDCN), New Delhi, India, January 4-7, 2022. (**best paper award**)
- (5) Francesco Betti Sorbelli, Federico Corò, Sajal K. Das, Emanuele Di Bella, Lara Maistrello, Lorenzo Palazzetti, Cristina M. Pinotti "A Drone-based Application for Scouting Halyomorpha halys Bugs in Orchards with Multifunctional Nets". The 20th International Conference on Pervasive Computing and Communications (PerCom 2022) March 21-25, 2022. (best demo award)
- (6) Francesco Betti Sorbelli, Federico Corò, Sajal K Das, *Lorenzo Palazzetti*, Cristina M Pinotti "Drone-based optimal and heuristic orienteering algorithms towards bug detection in orchards".

- 18th Int. Conf. on Distr. Computing in Sensor Systems (DCOSS 2022) May 30 June 1, 2022.
- (7) Francesco Betti Sorbelli, Alfredo Navarra, **Lorenzo Palazzetti**, Cristina M Pinotti, Giuseppe Prencipe "*Optimal and Heuristic Algorithms for Data Collection by Using an Energy-and Storage-Constrained Drone*". 18th International Symposium on Algorithms and Experiments for Wireless Sensor Networks, (ALGOSENSORS 2022) September 8-9, 2022.

Miscellaneous Experience -

Conferences and Workshops

ALGOSENSORS 2022, International Symposium on Algorithms and Experiments for Wireless Sensor Networks, Potsdam, Germany, September 8-9, 2022 [presenter]

IEEE DCOSS 2022, International Conference on Distributed Computing in Sensor Systems, Marina Del Rey, LA, California, May 30-June 1, 2022 [presenter]

IEEE PerCom 2022, International Conference on Pervasive Computing and Communications, online, March 21-25, 2022. [audience]

ACM ICDCN 2022, International Conference on Distributed Computing and Networking, online, January 4-7, 2022 [audience]

IEEE DCOSS 2021, International Conference on Distributed Computing in Sensor Systems, online, July 14-16, 2021 [audience]

ICTCS Italian Conference on Theoretical Computer Science, September 13-15, 2021 [presenter].

IEEE Wi-DroIT 2021, International Workshop on Wireless sensors and Drones in Internet of Things, online, July 14-16, 2021 [presenter].

HALG 2021, Highlights of Algorithms, online, May 31-3 June, 2021 [audience].

Awards and Achievements

Award, **Best paper** in 2022 International Conference on Distributed Computing and Networking (ICDCN 2022).

Award, **Best demo** in 2022 International Conference on Pervasive Computing and Communications (PerCom 2022).

Talks and Seminars

14/10/2022	"A Discussion about Smart Agriculture Technologies for Scouting Halyomorpha halys in Orchards", Rolla, MO, USA. seminar.
05/04/2022	"Routing Drones Being Aware of Wind Conditions", Perugia, Italy. class.
14/12/2021	"Drones & their Applications", Perugia, Italy. class.
14/03/2021	"Transaction & Fork Bitcoin", Perugia, Italy. seminar.
14/03/2021	"Tor & deanonymization attacks", Perugia, Italy. seminar.

Reviewer activity

Workshops and Conferences

ACM SIGKDD (2022).

IEEE WoWMoM (2022).

AAMAS (2022).

Skills -

Computer

OS Android, Linux, Microsoft Windows.

CODING Bash, C, Java, JavaScript, LTEX, MATLAB, Python, PHP, Visual Basic, Vi-

sual Basic for Applications, Pasqual, OCamel.

Framework Lavarel, Bootstrap.

DATABASES MySQL, PostgreSQL, SQLite.

WEB jQuery, Ajax, JSON, CMS.

SERVER Tomcat, Apache.

IDE PyCharm, NetBeans.

SOFTWARE Photoshop, Illustrator, Libreoffice, VirtualBox, Docker.

Languages

ITALIAN Mother tongue.

ENGLISH B1 Level.

French A2 Level.

Other

Drone License A1/A3 Open Sub Category.